

CRS HELPFUL HINTS Version 7.0 March 3, 2000

This information is available from the CRS Web page located at the following address:

www.nws.noaa.gov/oso/oso1/oso12/crs.htm

Having supported a number of production site installations, we have learned much about what to do and what can go wrong if not done properly. Therefore, we have compiled the following list (in no particular order) of helpful hints, pitfalls to avoid, and other interesting information.

1. Do Not Click on "crs_MP" from the Desktop - We have already seen the results of this at a couple of sites. If you sign on as root and click on "crs_MP" in the /crs directory (ostensibly to start CRS, which it won't), this script file will copy old inittab and kernel files to the /etc and /etc/conf/inet.d directories respectively and wipe out the correct ones. The old files do not have a CRS entry, so you will be unable to bring up CRS. If this does happen, you can restore the files from 5MP using the "rcp" command as follows: "rcp 5MP:/etc/inittab /etc" to restore the inittab file and "rcp 5MP:/etc/conf/init.d/kernel /etc/conf/init.d" to restore the kernel file. We have also found at least one case where clicking on "crs_MP" also caused the printer to stop functioning. This was remedied by shutting down OMP and starting it back up again. Please do not click on "crs_MP".

2. Do Not Schedule Unformatted AFOS Products on the CRS Line - If CRS receives unformatted AFOS products, i.e., regular AFOS products (metars, upper air data, etc.) that do not contain the CRS header information, it will just reject them, and you will receive no indication of this from CRS. They will not be saved in the weather message correction file. However, over a period of time (over 24 hours), if CRS receives many of these, it somehow prevents messages from getting into the CRS scheduler. In other words, no messages will broadcast. This includes all messages, including externally generated text, CRS generated voice messages, and even the STATIONID. If you have this symptom, check the AFOS message log for the line to CRS and note whether many non-CRS formatted AFOS messages have been transmitted. If so, this is probably the cause of the problem. To recover from this, shutdown and restart both MPs. However, you need to stop sending the offending messages from AFOS, so remove them from the Asynchronous Transmission Schedule via the SCHD: program.

3. Do Not Attempt to do a Software Install if You Do Not Have the Installation CD - This may seem obvious, but anything can happen if you just start playing around with the system, which also should be avoided. The installation procedure will delete the old files, and if you do not have the installation CD with the replacement files, you're in big trouble.

4. ASCII Database Transmitter Configuration Must Agree With Actual Hardware

Configuration - When you run the IDU program to set up your site specific database, you must be careful to properly define each transmitter so that the DECTalk card assigned to it is configured with the correct FEP and slot assignments. These assignments must be identical to the actual hardware installation. For a given number of transmitters, the DECTalk cards are assigned to specific FEPs and slots. For example, the six transmitter configuration requires two FEPS, each with four DECTalk cards (three transmitters plus one playback). This configuration allows us to have a backup FEP with only four DECTalk cards instead of the five that would be necessary if there were four transmitters plus one playback on 1FEP and two transmitters plus one playback on 2FEP. The important point here is that when you are running IDU, the DECTalk card assignments for each transmitter must match the actual hardware configuration. For the six transmitter example above, the assignments are as follows:

TXMTR	FEP #	SLOT #
1	1	1
2	1	2
3	1	3
4	2	1
5	2	2
6	2	3
PB1	1	5
PB2	2	5

5. Perform Full NWR System Alignment - It is essential that before you start broadcasting live with CRS that you perform a full NWR system alignment. Use the alignment procedures on the CRS Web Page to align the CRS output amplitudes. A Technical Information Package (TIP) will be available shortly that contains the transmitter alignment procedures. To ensure full NWR system alignment, these procedures should be done together. One note of caution must be mentioned here. Each Audio Switch Module (ASM) contains two audio output jacks. If you connect both outputs, you will reduce the amplitude levels from what you have with just one connected. Therefore, if you switch between having one or two outputs, you must realign your system each time you do this.

6. Restart GUI - It is possible that Graphical User Interface (GUI) performance will degrade over a period of time due to the build up of X-Window related processes. Therefore we recommend exiting the man-machine interface once a day, which will serve as a system cleanup to prevent this build up. This is done from the System menu by clicking on Exit to UNIX. After exiting, simply log back onto the CRS interface. This should only take a few seconds to perform, and the CRS application will continue to operate on all processors.

7. Modify Log store value in block 5 - By default, the log value in the Site Specific System Configuration section of the Block 5 of a CRS ASCII database file is set to 62. This means that CRS will store 62 days of log files in your system. If you do not have any requirement to keep this number of log files, please set this value to 3-5. CRS creates 4 log and index files per day, and you can experience slowness in system responses with too many log files.

8. Potential Audio Switch Controller Problem - There is a possibility that when the Audio Switch Assembly (ASA) is powered up that the Audio Switch Controller (ASC) can enter an embedded test mode that causes the Audio Control Panels (ACPs) to be locked in a test mode. In this test mode the ACP Transmitter Silence Alarms and the FEP Replace LEDs are lit. The workaround is to force the ASC via the parallel port on the 4BKUP FEP to place the ASC in a "normal" mode of operation, which unlocks the ACPs from the test mode. This is done as follows:

1) login to 4BKUP FEP as "root"

2) type: echo "N" >/dev/lp0

9. STATIONID Message - The STATIONID is a special type of message that can not be treated like any other message type. It is a message component, and therefore to create the STATIONID message (either voice or text), you must use the Message Components Window. Do not attempt to use the Weather Messages Window to generate a STATIONID message.

10. Supplemental Information For Operator Terminal Logon - This information is intended to emphasize and supplement Section 3.5.2 (Page 3 - 36) of the Site Operator's Manual (SOM). The CRS Login Screen is provided to allow you to log onto CRS. This discussion concerns the use of the Exit button on this screen. Clicking on this button will cause the X Window to terminate and you are returned to a character-based UNIX prompt. Unless you are specifically directed to exit the CRS Login Screen by the software help team, do not do so. A number of undesirable things may occur. Normally, when you exit from the Master Console, you will either return to the Console Login prompt or the UNIX # prompt. However, it is possible that the screen will go blank. This is normal when you exit the CRS Login Screen on the Shadow Console, but it is a problem when it occurs on the Master Console. If it does, press the ALT and SYSREQ keys together and then press N. This will return you to the UNIX prompt.

If you inadvertently exit the CRS Login Screen from the Shadow Console, you can return to it by opening up an XTERM window (UNIX Shell) from the Maintenance Menu on the Master Console and following the instructions for running the "nudge_xdm" script on page 7.1 of the SUM. If you inadvertently exit the CRS Login Screen from the Master Console, you can also return to it, but first you must also exit the CRS Login Screen from the Shadow Console. Follow these instructions at the Master Console for returning both consoles to the CRS Login Screen:

- If you have the UNIX # prompt, type in exit and enter as many times as necessary until you return to the Console Login prompt. Continue with instruction number 2.
- If you have the Console Login prompt, enter root and password, and the system will return to the Desktop Menu.
- Exit the Desktop Menu.
- At the UNIX # prompt, enter start_glogin
- This will return both consoles to the CRS Login Screen.

11. Group NWRSAME Tones - We strongly advise not using group NWRSAME tones. The CRS software provides the capability for including NWRSAME tones with message groups. The NWRSAME header tones will broadcast immediately before the first message in the group, and the NWRSAME trailer tones will broadcast immediately following the last message in the group. New or replacement messages in the group will cause the NWRSAME tones at the start and the end of the group to play again. If any of the messages in the group have NWRSAME tones associated with their message types, the group NWRSAME tones take precedence over the message type NWRSAME tones. We know of no operational use for the group NWRSAME function. This fact coupled with the fact that there are timing problems with group NWRSAME tones that can result in the improper repetition of the tones leads to our strong recommendation to not use them.